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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/539,602

03/31/2000

John K. Lenell

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32294 7590 05/24/2004

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EXAMINER

PHILPOTT, JUSTIN M

ART UNIT

PAPER NUMBER

2665

DATE MAILED: 05/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/539,602

**Applicant(s)**

LENELL, JOHN K.

**Examiner**

Justin M Philpott

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 April 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 March 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Priority*

1. Applicant's claim to Provisional Application No. 60/127,147, filed March 31, 1999 is acknowledged.
2. However, applicant has further attempted to claim priority to parent nonprovisional application 09/492,265, filed January 27, 2000 which claims priority to provisional application 60/117,481, filed January 27, 1999. Applicant is reminded that any claim in a continuation-in-part application which is directed *solely* to subject matter adequately disclosed under 35 U.S.C. 112 in the parent nonprovisional application is entitled to the benefit of the filing date of the parent nonprovisional application. However, if a claim in a continuation-in-part application recites a feature which was not disclosed or adequately supported by a proper disclosure under 35 U.S.C. 112 in the parent nonprovisional application, but which was first introduced or adequately supported in the continuation-in-part application, such a claim is entitled only to the filing date of the continuation-in-part application. See *In re Chu*, 66 F.3d 292, 36 USPQ2d 1089 (Fed. Cir. 1995); *Transco Products, Inc. v. Performance Contracting Inc.*, 38 F.3d 551, 32 USPQ2d 1077 (Fed. Cir. 1994); *In re Von Lagenhoven*, 458 F.2d 132, 136, 173 USPQ 426, 429 (CCPA 1972); and *Chromalloy American Corp. v. Alloy Surfaces Co., Inc.*, 339 F. Supp. 859, 874, 173 USPQ 295, 306 (D. Del. 1972). Accordingly, any claim in the instant application which recites a feature which was not disclosed or adequately supported in 09/492,265 and 60/117,481 is not entitled to the effective filing date of January 27, 1999.

***Drawings***

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: “signal 114” (page 20, line 5) is not included in FIG. 10. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: FIG. 11 includes the reference signs “216” and “218” which are not included in the specification. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

***Specification***

5. The disclosure is objected to because of the following informalities: “PHY 322” (page 20, line 25) should be changed to “PHY 321” and “MAC 102” (page 19, line 34) should be changed to “MAC 100” in order to remain consistent with the figures. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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7. Claims 4-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Specifically, claim 4 recites the limitation "the predetermined communication protocol" (lines 1-2). There is insufficient antecedent basis for this limitation in the claim. Applicant may overcome this rejection by changing "the predetermined communication protocol" to "the selectable communication protocol".

Claims 5-14 are rejected for being dependent upon a rejected base claim. Applicant may overcome this rejection by amending claim 4 as suggested above.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1, 2, 4-7, 9-11, 15 and 18-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art (AAPA) in view of text of Johnson entitled, "Detailed Guide to Fast Ethernet," (1996, Prentice Hall).

Regarding claims 1, 2 and 15, AAPA teaches a communication network (e.g., see prior art FIG. 10 and pages 19-20), comprising: a) a transceiver PHY (e.g., PHY 120) communicating data packets through a communication network according to a communication protocol, the PHY having (1) a PHY controller (e.g., 122), and (2) a state data register (e.g., 124) storing data

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representative of a state of the communication protocol; b) a media access controller MAC (e.g., MAC 100), operably coupled with a first communication system (e.g., comprising MAC 100 and PHY 120); c) a link partner (e.g., 140) operably coupled with a second communication system (e.g., comprising 140), the link partner cooperating with the PHY controller (e.g., via 126 and 124); and d) a communication channel (e.g., 130), operably coupling the PHY (e.g., 120) with the link partner (e.g., 140).

However, AAPA may not teach a selectable communication protocol is controlled by the controller and that the MAC lacks a state data register and is integrably coupled with the PHY.

Johnson teaches additional features for a communication network comprising a transceiver PHY and a media access controller MAC. Specifically, Johnson teaches a selectable communication protocol (e.g., selection of 10MBbps/10Base-T or 100Mbps/100Base-T operation, see page 113 regarding speed selection and page 170 regarding dual capability) implicitly controlled by a controller, that the registers reside in the PHY (see page 112, fourth paragraph) rather than the MAC, and that the MAC is integrably coupled with the PHY (e.g., see Figure 3.8 on page 114 with the MAC integrably coupled with the PHY). The teachings of Johnson provide a more intelligent and more flexible transceiver which is extendible to support future transceiver options for improved operation (e.g., see page 112, first paragraph). Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to apply the teachings of Johnson to AAPA in order to provide a more intelligent and more flexible transceiver which is extendible to support future transceiver options for improved operation (e.g., see page 112, first paragraph).

Regarding claim 4, AAPA teaches the communication protocol is defined by an IEEE Standard 802.3 communication protocol (e.g., see page 20, lines 1-11).

Regarding claims 5-7 and 18-20, Johnson teaches 802.3 protocol includes 10Base-T (e.g., see page 172), 100Base-T4 (e.g., see page 172), 100Base-TX (e.g., see page 172), 100Base-FX (e.g., see page 114, second paragraph), full-duplex (e.g., see page 113), and half-duplex (e.g., see page 113). While Johnson may not specifically further disclose 100Base-T and 100Base-T2 capability, Examiner takes official notice that such protocol capability is included in the existing 802.3 protocol. As discussed above, the teachings of Johnson provide a more intelligent and more flexible transceiver which is extendible to support future transceiver options for improved operation (e.g., see page 112, first paragraph). Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to apply the teachings of Johnson to AAPA in order to provide a more intelligent and more flexible transceiver which is extendible to support future transceiver options for improved operation (e.g., see page 112, first paragraph).

Regarding claims 9, 10, 21 and 22, AAPA teaches the protocol includes autonegotiation and the device further comprises an autonegotiation controller (e.g., autonegotiation controller 126) operably coupled to the data register (e.g., 124). Further, Johnson teaches autonegotiation selects the selectable communication protocol with state data (e.g., see pages 170-171 regarding autonegotiation). As discussed above, the teachings of Johnson provide a more intelligent and more flexible transceiver which is extendible to support future transceiver options for improved operation (e.g., see page 112, first paragraph). Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to apply the teachings of Johnson to AAPA in

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order to provide a more intelligent and more flexible transceiver which is extendible to support future transceiver options for improved operation (e.g., see page 112, first paragraph).

Regarding claims 11 and 23, AAPA teaches the data register (e.g., link partner capability register 124) is a link partner capability register (e.g., see FIG. 10).

10. Claims 3, 8, 12-14, 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art (AAPA) in view of Johnson, further in view of U.S. Patent No. 5,809,026 to Wong et al.

Regarding claims 3, 8 and 16, AAPA in view of Johnson teach the communication device of claims 2, 5 and 15 as discussed above, however, may not specifically disclose the PHY and the MAC are integrated on a monolithic VLSI component.

Wong also teaches a communication device comprising a PHY and MAC, and specifically, teaches the PHY and the MAC are integrated on a monolithic VLSI component (e.g., see col. 1, lines 46-55 regarding a single chip having PHY and MAC). The teachings of Wong provide PHY and MAC operation with significantly reduced cost and device size (e.g., see col. 1, lines 46-55). Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to apply the teachings of Wong to the device of AAPA in view of Johnson in order to provide PHY and MAC operation with significantly reduced cost and device size (e.g., see col. 1, lines 46-55).

Regarding claim 12, Wong teaches the device further comprises a plurality of PHY and a plurality of corresponding MAC (e.g., see FIG. 2 regarding MAC/PLS and see col. 5, lines 32-37 regarding a network of a plurality of components). As discussed above, the teachings of Wong



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provide PHY and MAC operation with significantly reduced cost and device size (e.g., see col. 1, lines 46-55). Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to apply the teachings of Wong to the device of AAPA in view of Johnson in order to provide PHY and MAC operation with significantly reduced cost and device size (e.g., see col. 1, lines 46-55).

Regarding claim 13, AAPA teaches the protocol includes autonegotiation and the device further comprises an autonegotiation controller (e.g., autonegotiation controller 126) operably coupled to the data register (e.g., 124). Further, Johnson teaches autonegotiation selects the selectable communication protocol with state data (e.g., see pages 170-171 regarding autonegotiation). As discussed above, the teachings of Johnson provide a more intelligent and more flexible transceiver which is extendible to support future transceiver options for improved operation (e.g., see page 112, first paragraph). Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to apply the teachings of Johnson to AAPA in order to provide a more intelligent and more flexible transceiver which is extendible to support future transceiver options for improved operation (e.g., see page 112, first paragraph). Also, as discussed above, Wong teaches the device further comprises a plurality of PHY and a plurality of corresponding MAC (e.g., see FIG. 2 regarding MAC/PLS and see col. 5, lines 32-37 regarding a network of a plurality of components). As discussed above, the teachings of Wong provide PHY and MAC operation with significantly reduced cost and device size (e.g., see col. 1, lines 46-55). Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to apply the teachings of Wong to the device of AAPA in view of Johnson in order to provide PHY and MAC operation with significantly reduced cost and device size (e.g., see col. 1, lines 46-55).

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Regarding claim 14, AAPA teaches the data register (e.g., link partner capability register 124) is a link partner capability register (e.g., see FIG. 10).

Regarding claim 17, AAPA teaches the communication protocol is defined by an IEEE Standard 802.3 communication protocol (e.g., see page 20, lines 1-11).

### *Conclusion*

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent No. 6,094,436 to Runaldue et al. discloses a multiport switch with shared media access control circuitry, U.S. Patent No. 6,272,551 to Martin et al. discloses a network adapter compatible with various communication protocols, and U.S. Patent No. 6,504,851 to Abler et al. discloses dynamic detection of LAN protocol.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin M Philpott whose telephone number is 703.305.7357. The examiner can normally be reached on M-F, 9:00am-5:00pm.

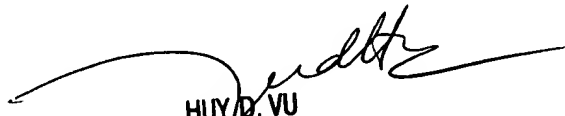
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy D Vu can be reached on 703.308.6602. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Justin M Philpott



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